

AMENDMENTS TO THE CLAIMS

Claims 1-8 (Canceled).

9. (Previously Presented) A method of manipulating particles comprising subjecting particles suspended in a liquid to a moving ultrasonic standing wave and to a varying electrical field capable of generating a dielectrophoretic force on the particles, wherein the moving ultrasonic standing wave and the varying electrical field are applied simultaneously, and further comprising applying the moving ultrasonic standing wave so as to move both types of particles across an electrode array, and applying to the electrode array an electrical signal at such a frequency that one type of particle experiences a strong negative DEP force and is diverted into one region of the electrode array while the second type of particle experiences a weak negative DEP force and is relatively unaffected as the second type of particle is moved across the array.

10. (Canceled).

11. (Canceled).

12. (Canceled).

13. (Canceled).

14. (Previously Presented) Apparatus for treating particles suspended in a liquid comprising a chamber, means

for feeding suspended particles into and out of the chamber, an electrode array on at least one wall of the chamber, means for applying to the electrode array an alternating electrical potential whereby to generate in suspended particles adjacent to the array a non-uniform alternating electric field so as to induce a dielectrophoretic force, and means for subjecting the liquid in the chamber to a moving ultrasonic standing wave, and wherein the chamber is a rectangular separation chamber, there being a pair of ultrasonic transducers arranged one at each end thereof, and in which the means for feeding suspended particles into the separation chamber comprises an input chamber mounted transversely to the separation chamber, the input chamber having a pair of ultrasonic transducers arranged one at each end.

15. (Canceled).